

PATENT COOPERATION TREATY

TRANSLATION

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To:

Date of mailing (day/month/year) **See Form PCT/ISA/210 (sheet 2)**

Applicant's or agent's file reference

P001737 SH

FOR FURTHER ACTION

See paragraph 2 below

International application No.

PCT/FR2004/003177

International filing date (day/month/year)

09.12.2004

Priority date (day/month/year)

09.12.2003

International Patent Classification (IPC) or both national classification and IPC

H01H1/24

Applicant

TCL & ALCATEL MOBILE PHONES LIMITED

1. This opinion contains indications relating to the following items:

- | | | |
|-------------------------------------|--------------|--|
| <input checked="" type="checkbox"/> | Box No. I | Basis of the opinion |
| <input type="checkbox"/> | Box No. II | Priority |
| <input type="checkbox"/> | Box No. III | Non-establishment of opinion with regard to novelty, inventive step and industrial applicability |
| <input type="checkbox"/> | Box No. IV | Lack of unity of invention |
| <input checked="" type="checkbox"/> | Box No. V | Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement |
| <input type="checkbox"/> | Box No. VI | Certain documents cited |
| <input type="checkbox"/> | Box No. VII | Certain defects in the international application |
| <input checked="" type="checkbox"/> | Box No. VIII | Certain observations on the international application |

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/EP

Authorized officer

Facsimile No.

Telephone No.

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Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rule 12.3 and 23.1(b)).
2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
 - a. type of material
☐ a sequence listing
☐ table(s) related to the sequence listing
 - b. format of material
☐ in written format
☐ in computer readable form
 - c. time of filing/furnishing
☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table(s) relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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Box No. V

Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-4	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1-4	NO
Industrial applicability (IA)	Claims	1-4	YES
	Claims		NO

2. Citations and explanations:

Reference is made to the following documents:

D1: US 2002/022459 A1 (KOBAYASHI TAKESHI)

21 February 2002 (2002-02-21)

D2: WO 02/101875 A (ALLGON MOBILE COMM AB;

OESTERVALL TORSTEN (SE)) 19 December 2002

(2002-12-19)

- The present application fails to comply with the requirements of PCT Article 33(1) since the subject matter of claim 1 does not involve an inventive step as defined in PCT Article 33(3).

Document D1, which is regarded as the prior art closest to the subject matter of claim 1, describes (the references between parentheses apply to this document):

*a radio communication terminal (figure 2)
comprising a housing consisting of a front
shell (figure 2; 3) and of a rear shell
(figure 2; 2) enclosing:*

- a printed circuit card extending parallel

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*to the rear shell and to the front shell
(figure 2; 6),*

*- an energy accumulator placed in a first
dedicated space, exhibiting an upper
surface extending in a plane parallel to
the rear shell (figure 2; 4),*

*- a patch antenna placed in a second space
situated between the rear shell and the
printed circuit card, the said second space
being contiguous with the first space, the
said antenna being connected to the energy
accumulator via the printed circuit card
(fig. 2),*

*- the terminal comprises a vacant space
around the energy accumulator (figure 2)*

Consequently, the subject matter of claim 1 differs
from this known document D1 in that:

*the energy accumulator is placed in a first
dedicated space situated between the rear
shell and the printed circuit card and in that
a second space occupied by the said antenna
extends over at least a part of this vacant
space.*

The problem that the present invention is intended
to solve can thus be considered to be how to
miniaturize a radio communication terminal.

The solution to this problem, as proposed in claim 1
of the present application, is not considered to

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involve an inventive step (PCT Article 33(3)), for
the following reasons:

Document D2 presents a radio communication terminal
where, for reasons of miniaturization, the antenna
overhangs the space of the energy accumulator (see
figure 4).

2. In dependent claims 2 to 4, slight constructional
changes in the device of figure 4 of document D1 are
defined which come within the scope of the customary
practice followed by persons skilled in the art,
especially as the advantages thus achieved can
readily be foreseen. In consequence, the subject
matter of these claims does not involve an inventive
step either.

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Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

1. The application fails to comply with the requirements of PCT Article 6, claims 1 and 2 not being clear. According to the claims, it is the space which surrounds the antenna which extends in part or totally over the space occupied by the energy accumulator. Outside, according to the description, it follows therefrom that it would be the antenna itself which occupies a part or the whole of the space defined around the accumulator.

2. Contrary to the requirements of PCT Rule 5.1(a)(iii), the relevant prior art disclosed in documents D1 and D2 is not mentioned in the description, nor are these documents identified therein.